compliance with Spigelman scoring system. 4/14 had recurrent Duodenal adenomas after EMR. 3 patients were found to have Colon cancer. So it is essential that all patients with Duodenal adenomas have a colonoscopy.

REFERENCES
1 The role of endoscopy in ampullary and duodenal adenomas. Gastrointestinal Endoscopy 2006; 64(4)
2 Murray et al., Sporadic duodenal adenoma is associated with colorectal neoplasia. Gut 2004
3 Ramsoekh et al., Sporadic duodenal adenoma and the association with colorectal neoplasia: a case-control study. The American Journal of Gastroenterology 2008

Disclosure of Interest None Declared.

PTU-178 CLINICAL UTILITY OF ENDOFASTER® IN PATIENTS ON CHRONIC PPI THERAPY UNDERGOING UPPER GI ENDOSCOPY
1R Cayado-Lopez*, 2J Bornschein, 2S Zeki, 1M d’arbe, 2M Di Pietro. 1MRC Cancer Cell Unit – Cambridge University Hospitals, UK; 2MRC Cancer Cell Unit – Cambridge University Hospitals, Cambridge, UK
10.1136/gutjnl-2014-307263.252

Introduction Patients undergoing upper GI endoscopy (OGD) are often on chronic PPI therapy for dyspeptic symptoms or gastro-oesophageal reflux disease (GORD). Continued PPI therapy at the time of the endoscopy can influence the outcome of H. pylori testing via rapid urease test (CLO) or even histology. In addition, complete response to PPI in patient with GORD or Barrett’s oesophagus (BO) is often not fully predicted by the clinical history. We hypothesised that rapid testing of H. pylori status and gastric pH by Endofaster® could provide the physician with real-time information useful to influence patient management.

Methods This pilot feasibility study included 135 consecutive patients at a single centre who underwent OGD for BO surveillance/endotherapy (n = 95), screening for hereditary diffuse gastric cancer (n = 11) and evaluation of GORD/dyspepsia (n = 29). The pH and the H. pylori status were measured on 4 mL of gastric aspirate using the Endofaster®, which connects to the suction port of the gastroscope. If clinically indicated, CLO test or gastric biopsies were performed. Endofaster® results were matched with the history of PPI intake (PPI type and time of last dose) and results of CLO and gastric histology.

Results Overall, 109 patients were on chronic PPI treatment and of these 74% presented with gastric hypochloridria (pH >4) at Endofaster® analysis. Forty-nine patients reported PPI intake on the same day of the OGD and 15% of these (n = 7) had acid gastric pH (<4). Fifty-nine patients had CLO test and 57 had gastric histology results available, while 26 patients had both. Only 1 patient was positive for H. pylori on histology, which was also positive at Endofaster®. Two patients had a positive CLO test, of which one was Endofaster® positive for H. pylori. Eleven patients were positive at the Endofaster® but not at CLO, of which 91% were on chronic PPI (n = 10).

Conclusion This feasibility study shows that a significant proportion of patients on chronic PPI therapy still have acidic gastric pH suggesting sub-optimal response to PPI. Endofaster® may detect H. pylori infection in patients on chronic PPI therapy, which are often false negatives when tested by CLO and histology. A prospective study matching Endofaster® data with gold standard tests for H. pylori status and gastro-oesophageal reflux are needed to conclude on the clinical implications of these findings.

Disclosure of Interest None Declared.

PTU-179 SOCIAL DEPRIVATION IN BARRETT’S OESOPHAGUS?
1C Caygill, 2S Bhattacharjee*, 1A Charlett, 2A Fox, 3P Gatenby, 1A Watson, 2C Royston, 1KD Bardhan. 1UCL Div of Surgery and Interventional Science, Royal Free Hospital, London, UK; 2UKBOR, UCL, London, UK; 3Statistics, Modelling and Economics Department, Public Health England, London, UK; 4Department of Gastroenterology, The Rotherham NHS Foundation Trust, Rotherham, UK
10.1136/gutjnl-2014-307263.253

Introduction Squamous oesophageal carcinoma is more prevalent in those with lower socio-economic status. Little is known about this for oesophageal adenocarcinoma (OAC). Anecdotally, OAC has been observed in higher socio-economic groups. Barrett’s oesophagus (BO) is the only known precursor of OAC. This study investigates the association between BO and social deprivation using the 2010 Index of Multiple Deprivation (IMD).

Methods Patients: 1076 BO diagnosed in Rotherham, between April 1978 and August 2012. IMD: The Office for National Statistics (ONS) divides England into geographical areas each with a similar population size termed Lower Layer Super Output Areas (LSOA). The 2010 IMD comprising a combination of 38 separate indicators is assigned to each LSOA. Every residential postcode is assigned to a LSOA and thus an IMD. This was applied to the postcodes of Rotherham patients at time of BO diagnosis. IMD Quintiles were derived by dividing the distribution of all IMD scores in England into 5 equal categories. The 6257 residential postcodes for Rotherham and the 1076 BO patients were placed in the quintiles relevant to their IMD score; Analysis: Chi square goodness of fit tests were used to compare the observed

<table>
<thead>
<tr>
<th>IMD quintile descending order of deprivation</th>
<th>Rotherham postcodes* n = 6257</th>
</tr>
</thead>
<tbody>
<tr>
<td>BO diagnosed = 2000</td>
<td>BO diagnosed = 2001</td>
</tr>
<tr>
<td>n = 490</td>
<td>n = 586</td>
</tr>
<tr>
<td>Observed (O)</td>
<td>Expected (E)</td>
</tr>
<tr>
<td>Most deprived</td>
<td>2282</td>
</tr>
<tr>
<td>2nd most deprived</td>
<td>1659</td>
</tr>
<tr>
<td>3rd most deprived</td>
<td>988</td>
</tr>
<tr>
<td>2nd least deprived</td>
<td>1049</td>
</tr>
<tr>
<td>Least deprived</td>
<td>279</td>
</tr>
<tr>
<td>p value</td>
<td>0.21</td>
</tr>
</tbody>
</table>

* Each postcode includes ~20 households.
Oesophageal adenocarcinoma (OAC) arises within Barrett’s oesophagus (BE). Obesity is associated with metabolic syndrome (MS) and cancer progression. Body composition has a direct impact on obesity-related diseases. Normal weight individuals with increased fat mass are considered metabolically obese.

Methods To evaluate the prevalence of obesity, altered body composition and metabolic indexes in patients (pts) with and without BE; and association with cancer progression in BE. In sequential pts undergoing gastroscopy, MS, waist/hip ratio (WHR) and body fat% (BF by bioimpedance analysis) were obtained. In BE pts, histological findings were correlated with metabolic data. Pts were classified according to Body Mass Index (BMI), abdominal obesity (AO by WHR) and in females, Normal Weight Obese (NWO). Identified risk factors significantly associated with BE at univariate analysis were subsequently entered into a multivariate logistic regression analysis.

Results 250 cases and 230 controls (F/M: 193/287) were enrolled. Age (cut off: 57 years) and male gender (M/F 193/57; OR 5.01, p < 0.0001) were identified risk factors for BE. AO (76% vs 51%; OR 3.13; p < 0.001), increased BF% (30.7 vs 17.6%; p = 0.001), higher BMI (overweight: 39.6 vs 30%; OR 2.09; p = 0.008; obese: 32 vs 22%; OR 2.3; p = 0.004) and MS (33.2 vs 20%; OR 1.95; p = 0.0017) were significantly associated with BE. A positive trend, possibly related to the small number of female cases, was demonstrated for NWO. Lower AO was observed in the last decade, however, the highly significant difference observed points to a strong association between lower deprivation and increasing risk of BO. To the best of our knowledge this is the first report showing a quantitative link between BO and socio-economic status, which may form a basis for the apparent socio-economic shift between squamous oesophageal cancer and OAC.

Disclosure of Interest None Declared.